Bradley, Kevin (HC/SC)

From:	MBU Services / UIM (HC/SC)
Sent:	2021-02-25 7:52 AM
To:	Coyle, Frederick (HC/SC); Gauthier, Gilbert (HC/SC); De Santis, Kendra (HC/SC); Waite, Meghan (HC/SC); Wong, Jamie (HC/SC); Desmarteaux, Mathieu (HC/SC); Carriere, Louise (HC/SC); Choquette, Nathalie (HC/SC)
Subject:	FW: URGENT Joint HC/PHAC M2M: 21-103639-739 - Meeting with the COVID-19 Therapeutics Task Force, February 25, 2021
Attachments:	A - Therapeutics Task Force Terms of Reference - EN.PDF; B - Biographies of Task Force Members.pdf; D - Annotated Agenda - Therapeutics Task Force February 25 (003).docx; 21-103639-739 M2M for mtg signed by DM.pdf; C - Agenda - CTTF - 2021-02-25.docx
Importance:	High

From: Takeda, Bryan (HC/SC)
Sent: Thursday, February 25, 2021 7:51:57 AM (UTC-05:00) Eastern Time (US & Canada)
To: Ochmann St-Jean, Romy (HC/SC); Mead, Jobina (PHAC/ASPC)
Cc: Nayeri, Gita (HC/SC); MBU Services / UIM (HC/SC); Levesque2, Kaili (HC/SC)
Subject: URGENT Joint HC/PHAC M2M: 21-103639-739 - Meeting with the COVID-19 Therapeutics Task Force, February 25, 2021

Hi Romy/Jobina: see attached docs for today's meeting. PHAC-President has approved. I don't have a signed version yet, but sending to you now for expediency sake.
Bryan

From: MBU Services / UIM (HC/SC)
Sent: 2021-02-24 5:17 PM
To: Takeda, Bryan (HC/SC) ; Coyle, Frederick (HC/SC) ; Gauthier, Gilbert (HC/SC) ; De Santis, Kendra (HC/SC) ; Waite, Meghan (HC/SC) ; Desmarteaux, Mathieu (HC/SC) ; Carriere, Louise (HC/SC) ; Choquette, Nathalie (HC/SC)
Subject: FW: UPDATED: URGENT Joint HC/PHAC Memo for HC DM and PHAC President's Signatures ASAP: 21-103639-739 - Meeting with the COVID-19 Therapeutics Task Force, February 25, 2021
Importance: High

From: Wong, Jamie (HC/SC)
Sent: Wednesday, February 24, 2021 5:16:57 PM (UTC-05:00) Eastern Time (US & Canada)
To: briefing (PHAC/ASPC)
Cc: MBU Services / UIM (HC/SC)
Subject: UPDATED: URGENT Joint HC/PHAC Memo for HC DM and PHAC President's Signatures ASAP: 21-103639-739 - Meeting with the COVID-19 Therapeutics Task Force, February 25, 2021

Good afternoon,
Please find attached urgent updated docket 21-103639-739 - Meeting with the COVID-19 Therapeutics Task Force, on February 25, 2021, for PHAC President's signature ASAP.
Please note that the Deputy Minister of Health has signed the memo (see attached). If it is not too late, would it be possible to provide it to the PHAC President's Office to ensure both the PHAC President's and HC DM's signatures are on the same page? The memo is already on GoC letterhead.
Please provide MBU with a scanned signed copy of the memo once PHAC President has signed. MBU will provide to MO for the Minister's meeting.
Audit trailed to PHAC-Briefing.

Thanks,
Jamie

From: Wong, Jamie (HC/SC)
Sent: 2021-02-24 4:21 PM
To: Rassi, Daniel (HC/SC) <daniel.rassi@canada.ca>; briefing (PHAC/ASPC) <phac.briefing.aspc@canada.ca>
Cc: Nayeri, Gita (HC/SC) <gita.nayeri@canada.ca>; MBU Services / UIM (HC/SC) <hc.mbu.services-uim.sc@canada.ca>; Carbonneau, Pascale (HC/SC) <pascale.carbonneau@canada.ca>; Eades, Pamela (HC/SC) <pamela.eades@canada.ca>; Timmins, Monique (HC/SC) <monique.timmins@canada.ca>; Jeffrey, Heather (HC/SC) <heather.jeffrey@canada.ca>
Subject: URGENT Joint HC/PHAC Memo for HC DM and PHAC President's Signatures ASAP: 21-103639-739 - Meeting with the COVID-19 Therapeutics Task Force, February 25, 2021
Importance: High

Good afternoon,

Please find attached urgent joint HC/PHAC COVID-TF (Medical Countermeasures and Research Initiatives) memo for HC DM and PHAC President's signatures ASAP, regarding the Meeting with the COVID-19 Therapeutics Task Force, on February 25, 2021.

Once signed by PHAC President, could PHAC please provide a scanned signed copy to MBU Services as soon as possible?

The memo attached includes the electronic GoC letterhead to simplify processing.

Audit trailed to PHAC-Briefing and DMO-DR.

Hard copy docket to be provided by MBU (Gilbert) to DMO inbox on 15th floor. Additional copies included for DM/AsDM and Les Linklater (COVID-related docket).

Thanks,
Jamie

Government of Canada Gouvernement du Canada

FOR A MEETING

21-103639 - 739

HEALTH CANADA / PUBLIC HEALTH AGENCY OF CANADA MEMORANDUM TO THE MINISTER OF HEALTH

Meeting with the COVID-19 Therapeutics Task Force / Réunion avec le groupe de travail sur les thérapeutiques de la COVID-19

SUMMARY

- You are meeting with the COVID-19 Therapeutics Task Force (TTF) on Thursday, February 25, 2021. This will be the last meeting of the TTF, and provides an opportunity for you to thank members for their in-kind contributions of time and expertise to Canada's COVID-19 response.
- Minister Champagne will attend the first portion of the meeting and provide his reflections, the group will then turn to TTF business and you will join for the last portion of the meeting and provide remarks.
- Since their inaugural meeting on July 13, 2020, the TTF has met 35 times, reviewed 98 Strategic Innovation Fund (SIF) proposals, and recommended ten of the projects for funding through SIF to advance their development. The TTF's mandate was extended in November until the end of February 2021.
- Appendix A contains the TTF Terms of Reference. Appendix B contains the biographies of members. An annotated agenda for the meeting, which includes points to register, is attached as Appendix D.

BACKGROUND:

The COVID-19 Therapeutics Task Force (TTF) has been responsible for providing advice to the Government of Canada on COVID-19 therapeutics, drawing on their expertise in life sciences research and development and commercialization. Their mandate is to provide advice to the Government of Canada on COVID-19 therapeutics assessing and prioritizing COVID-19 therapeutic projects seeking support for activities in Canada. The TTF Terms of Reference can be found in Appendix A.

Canada

TTF membership is comprised of 7 core members, including two Co-chairs (Nancy Harrison and Cedric Bisson), drawn from research and business leaders with proven ability to bring new therapies to market in Canada; up to 5 science advisors; and, four ex-officio members. A list of member biographies can be found in Appendix B. Secretariat support is provided by Innovation, Science and Economic Development Canada (ISED).

As of February 22, 2021, the TTF have met 35 times, reviewed 98 candidates, and provided recommendations on 54 of the projects submitted to the Government of Canada. Of these, 10 projects have been recommended for funding to advance their development (4 project for a clinical trial, 4 projects for pre-clinical phase funding, and 2 others for funding to further advance the work), and 6 recommendations to purchase internationally led therapeutics.

You and the Honourable Minister of Innovation, Science and Industry, François-Philippe Champagne, have been invited to join the TTF on February 25, 2021 from 10:00 am to 11:30 am. You will join at 11:00 am.

The meeting will be led by the TTF Co-chairs who will provide opening remarks and then turn first to Minister Champagne, and then to you for comments. After your remarks, there will be time for questions. An annotated agenda for the meeting, which includes points to register, is attached as Appendix C.

Members were informed at their previous meeting on February 18, 2021 that, despite their mandate ending, there may be an interest in engaging the TTF, or seek advice from members, on an ad-hoc basis, if and when their expertise is required.

CONSIDERATIONS:

Health Canada (HC) and the Public Health Agency of Canada (PHAC) are currently looking at options to ensure the appropriate external advice is available to Canada to support procurement of therapeutics. This includes the Clinical Pharmacology Task Group (CPTG), which currently provides pharmacological recommendations to PHAC officials. HC and PHAC are also looking at options to further engage and partner with PTs to better understand their needs for therapeutics.

At the previous meeting TTF members expressed concern that their mandate was ending. TTF members were specifically concerned about what they felt was insufficient attention to therapeutics, failures of implementation, and the need to be forward looking for surveillance of upcoming therapeutic opportunities. It is expected that TTF members will raise these concerns to you.

You may wish to highlight that the Health Portfolio may reach out to TTF members from time to time to seek their expertise and advice in the coming months as work on therapeutics and responses to variants of concern continue.

NEXT STEPS:

An annotated agenda for the February 25, 2021 meeting, including points to register, is attached as Appendix D.

The Health Portfolio will continue to ensure sufficient and appropriate expert advice is available to the Government of Canada on therapeutics.

FEB 24 2021

President
Public Health Agency of Canada

Deputy Minister
Health Canada

FEV FEB 24 2021

Branch Head: Kaili Levesque, ADM, Medical Countermeasures and Research Initiatives
Telephone: 613-818-0492

Attachments
Appendix A – Terms of Reference - Therapeutics Task Force
Appendix B – Biographies - Therapeutics Task Force
Appendix C – Agenda - Therapeutics Task Force February 25
Appendix D – Annotated Agenda (including points to register) - Therapeutics Task Force February 25

COVID-19 Therapeutics Task Force

TERMS OF REFERENCE

1. PURPOSE:

(1) The COVID-19 Therapeutics Task Force ('Task Force') will be responsible for providing advice to the Government of Canada on COVID-19 therapeutics, drawing on their expertise in life sciences research and development and commercialization. This Terms of Reference is comprised of four sections that outline the purpose, mandate, governance structure and procedural items of the Task Force.

2. MANDATE

(2) The Task Force mandate is to provide advice to the Government of Canada on COVID-19 therapeutics assessing and prioritizing COVID-19 therapeutic projects seeking support for activities in Canada.

3. GOVERNANCE

3.1. Structure and composition

(3) The Task Force will be comprised of:

- up to 7 core members, including two Co-chairs, drawn from research and business leaders who have proven ability to bring new therapies to market in Canada;
- up to 5 science advisor members chosen on a rotating basis from a roster of experts to review and provide advice on projects within their area of expertise (e.g., antivirals, anti-inflammation); and,
- four ex-officio members

(4) The Task Force will provide advice to the Ministers of Innovation, Science and Industry and Health.

(5) The Deputy Minister of Innovation, Science and Economic Development Canada, the Deputy Minister of Health Canada, the President of the Public Health Agency of Canada and the Chief Science Advisor will be ex officio members.

(6) Task Force members are appointed as individuals and not as representatives of organizations.

(7) The Task Force can, at their discretion, consult with additional subject matter experts on an as-needed basis.

3.2. Confidentiality and Conflict of Interest

(8) Task Force members will sign a confidentiality and conflict of interest agreement. Furthermore, if at anytime a member becomes aware of a potential project in which he/she has a personal financial interest, it will be disclosed to the Co-chairs and to the Government of Canada representative who shall have the right to ask the member to formally recuse themselves from participating in discussions related to that project.

(9) The Task Force will ensure that advice received from additional subject matter experts will not result in any conflict of interest, and that there is full disclosure to the Government of Canada representative of any potential real or perceived conflicts of interest, where known.

(10) Documents or information obtained while serving on the Task Force should be used only in the context of fulfilling the duties and mandate of the Task Force. Any documents or information obtained through a meeting of the Task Force will be kept strictly confidential by the member, unless prior approval to disclose is obtained in writing from the Government of Canada representative.

(11) In dealings with the media, public forums, and in inter-personal conversation, members will show sensitivity and discretion in any statement made regarding the activities of the Task Force, and will refrain from disclosing any information shared with or by Task Force members.

3.3. Timing and Deliverables

(12) The Task Force will be in place for a period of at least 6 months, subject to extension at the discretion of the Government of Canada, and will meet on an as-needed basis.

(13) The Task Force will determine its own meeting schedule in order to meet the direction and deadlines provided by the Government of Canada's designated representative.

(14) The advice of the Task Force, and any supporting products provided to the Government of Canada by members, will remain the property of the individual members and held in confidence by the Government of Canada.

(15) Decisions on the advice provided will be made on a consensus basis. Consensus will have been reached when there is agreement to the extent that all participants are willing to support the outcome or use it as a basis for further discussion. The outcome must show how dissenting points of view were accommodated and record what has and has not been agreed upon. Ex-officio members may participate in discussions but will not participate in the decision-making related to the provision of advice from the Task Force.

4. PROCEDURAL ITEMS

4.1. Member Responsibilities

(16) All Participants will:

- agree to act in "good faith" in all aspects of the process;
- commit to fully explore issues, searching for solutions in a problem solving atmosphere; and,
- agree to make a good faith attempt to share information in matters related to the shared decision-making process.

(17) It is the responsibility of the Co-chairs to:

- Approve meeting agendas in advance of meetings, working with the Secretariat;

- Encourage the active participation of all members;
- Monitor progress on action items between meetings;
- Establish and chair sub-working groups, where appropriate; and,
- Chair meetings of the Task Force.

(18) It is the responsibility of each Task Force member to:

- Stay current with information and the progress of discussions;
- Attend each meeting, to the best of their ability.

4.2. Secretariat

(19) Government of Canada officials will be provided for administrative and technical support of the Task Force. The primary role of the Secretariat will be to coordinate and support the work of the Task Force. This includes:

- Design and delivery of meeting agendas;
- Development and monitoring of the work plan; and,
- Organization and facilitation of meetings.

The Secretariat will make every reasonable effort to gather data and information and draft materials to support the Task Force in fulfilling its mandate.

4.3. Technical and Substantive Information

(20) The Secretariat, provided by the Government, will provide support for the meetings in the form of recording notes and dispersing information.

(21) All efforts will be taken by the Government of Canada to provide all information requested of them except if covered by Cabinet confidentiality or privacy restrictions, within the limits of government budget and staffing power.

(22) Documents for the Task Force will be password-protected and provided by the Secretariat through a secure file sharing site.

(23) Tentative or sensitive data or other information will be respected as such, by both the Task Force and the Government of Canada.

4.4. Meetings

(24) Meetings will be held on an as needed basis, at the discretion of the Co-chairs. Meetings will be held by teleconference/video conference to respect physical distancing requirements and avoid non-essential travel.

(25) To ensure the effectiveness of the meetings, the Secretariat will forward to all participants prior to the meeting: an agenda, record of decision from previous meetings, background information where possible and a clear statement of the objectives for the meeting.

(26) All meetings will be conducted according to the following ground rules:

1. Meetings shall begin promptly at the time indicated on the agenda.
2. The meetings shall be chaired in a manner that:
   - Ensures that time is allotted for discussion of each item on the agenda;

    - A balance of views and discussion takes place on each issue;
    - All participants have an opportunity to participate equally in discussion on a topic.
3. The chairing of the meetings will alternate between the two Co-chairs, according to a schedule to be set out in the work plan.
4. The meeting chair shall ensure that the manner in which each topic on the agenda is dealt with is clearly summarized at the conclusion of that discussion.
5. The meeting chair has the responsibility to facilitate meetings. However, members have the opportunity to make recommendations to the Chair and Secretariat on alternative facilitation.

(27) Meeting summaries shall be prepared and distributed in a timely manner under the direction of the Secretariat.

4.5. Public Communication and the Media

(28) The following procedure will be followed with respect to public communication:

- The Secretariat shall be the government contact for all media inquiries;
- Media releases will be agreed to by consensus prior to release;
- In the event that members wish to respond to media inquiries, they are to speak from their own perspective and not from that of the Task Force; and,
- Audio and visual recording will not be permitted at Task Force meetings.

4.6. Process to Withdraw

(29) Any member considering withdrawing from the Task Force will be asked to notify the Co-chairs and the Secretariat as soon as possible. The member will continue to be bound by the Terms of Reference, particularly with respect to confidentiality of information shared.

Biographies for Members of the COVID-19 Therapeutics Task Force

CORE MEMBERS 2
Cedric Bisson (co-chair) 3
Nancy Harrison (co-chair) 4
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Marceline Côté 12
Eleanor Fish 13
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Pamela Ohashi 18
James Russell 19
Makeda Semret 21
Don Sheppard 22
Don Vinh 23

CORE MEMBERS

CEDRIC BISSON (CO-CHAIR)

Partner, Teralys Capital

Montréal, QC

Cedric Bisson has extensive experience across Canada, USA and Europe creating, building, financing and advising businesses in biopharmaceuticals, healthcare and the innovation sector in general. Cedric is currently partner at Teralys Capital where he leads pan-Canadian efforts for an entrepreneurial life sciences ecosystem. Teralys Capital is Canada's largest private innovation-focused investor, financing funds and companies in tech and life sciences, from early stage start-ups to expansion, growth and technology buy-outs. He was previously managing partner for life sciences at iNovia Capital, and prior to this, spent many years internationally as associate principal at McKinsey & Company, a large global management consulting firm. Cedric actively engages globally on impactful innovation and public policy, most notably as board member with Montreal InVivo, a life sciences and health technologies cluster, Grand Challenges Canada, a Toronto organization dedicated to supporting bold ideas with big impact in global health, and Procure, a large charity in prostate cancer. Cedric obtained a M.D. degree from McGill University and a J.D. (law) degree from Universite de Montreal.

NANCY HARRISON (CO-CHAIR)

Life sciences investor and executive; board member, LifeSciences BC

Vancouver, BC

Nancy has nearly 30 years of professional and leadership achievement in life sciences in Canada. As a partner at Ventures West, she was one of the early life science investors in Canada, making key and strategic investments in companies such as Angiotech, AnorMed, Celator, Caprion, Xenon and many others, impacting the sector's long-term growth across the country. She is co-founder and former president of MSI Methylation Sciences, a private company with a unique treatment of depression in Phase 2. Harrison is a true innovator and demonstrates her dedication to Canadian biotech in mentoring the next generation of companies and leaders through roles that include Creative Destruction Lab, adMare BioInnovations, Canada's Digital Technology Supercluster, Genome BC and Knight Therapeutics. Harrison is a past winner of the Miton Wong Leadership Award from Life Sciences BC, Excellence in Industry from Women in Finance, Canada's Top 40 under 40. She has a bachelor of engineering from Queen's University and an MBA from McGill.

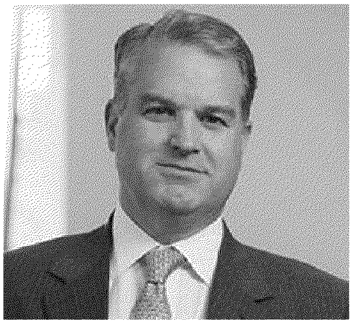
MAHA KATABI

General Partner, Sofinnova Investments

Montréal, QC

Maha joined Sofinnova as a Partner in 2019. In 2020, she was promoted to General Partner. She focuses on development stage investments in therapeutics. Maha represents Sofinnova as a member of the board of directors for Northsea Therapeutics. Prior to joining Sofinnova, Maha was a Managing Partner of Oxalis Capital. She is an experienced investor in biopharma companies, with over two decades in venture capital investing and public equities portfolio management. Prior to founding Oxalis in 2018, Maha was a Partner at Sectoral Asset Management since 2008, where she formed and led a dedicated investment team and advisory board to drive investments in private companies. Additionally, she was a Portfolio Manager for a family of funds, that invested in publicly listed and private healthcare companies. Prior to Sectoral, Maha was Vice-President at Ventures West Management since 2004, a venture capital firm focusing on technology and life sciences in Canada and the United States. She started her venture capital career in 1999 at T2C2 Capital Bio, a seed fund focused on Canadian start-ups. Maha received her PhD in Pharmacology and BSc in Biology from McGill University, and is a CFA charterholder. She is currently Chair of the board of Exactis Innovation, an oncology precision medicine network in Canada.

GORDON MCCAULEY



President and CEO, adMare BioInnovations

Vancouver, BC

Gordon McCauley was appointed President and CEO of adMare BioInnovations in 2017 after serving on the Board for four years. Mr. McCauley is an accomplished life science investor and executive.

He has served as President & CEO of Viable Healthworks Corp., a national healthcare service business; President and CEO of Allon Therapeutics Inc., a neuroscience biotechnology company that developed novel therapeutics from pre-clinical to global phase 3 studies before being sold; and Co-Founder and Partner of NDI Capital, an institutionally-backed life-science investment fund. Mr. McCauley has also been a senior executive of several successful health care enterprises and a senior advisor to several prominent Canadian political leaders.

Mr. McCauley has been a Director of a number of both private and publicly traded companies. Currently Mr. McCauley is a Director of adMare BioInnovations (and a number of its portfolio and subsidiary companies), BIOTECanada, Canada's national biotech industry organization, and Chairman of the Board, CGen, Canada's national genomics enterprise. Until recently, he was also a Director of LifeSciences British Columbia and served as its Chair from 2012 – 2015. In 2008 Mr. McCauley was the first Canadian appointed to the Board of The Biotechnology Industry Organization (BIO) in Washington D.C., where he served in leadership positions until 2013. He is Past Chair of Acetech, and was a founding Director of the Toronto Rehabilitation Institute and Past Chair of the Toronto Rehab Foundation.

PARIMAL NATHWANI

President & CEO, Toronto Innovation Acceleration Partners

Toronto, ON

Parimal Nathwani has over 15 years of experience in various aspects of the biotechnology industry including corporate finance, business development, transactions, intellectual property management, technology development and operations. He has been actively involved in forming and managing start-ups, preparing and executing on business plans, raising early-stage capital and in- and out-licensing activities.

Before joining MaRS Innovation, now Toronto Innovation Acceleration Partners (TIAP), Parimal was a healthcare analyst with a boutique investment bank, where he conducted equity research on publicly-traded biotechnology companies in Canada and the U.S. He has also led commercialization activities out of BC Women's and Children's Hospital as part of his role at the University of British Columbia's Industry Liaison Office, and was a research scientist at a start-up biotechnology company involved in drug discovery targeting ABC Transporters.

Parimal received his MBA from Simon Fraser University and his M.Sc. from the University of British Columbia. He currently sits on the boards of TRIUMF Innovations, Zucara Therapeutics, and Vasomune Therapeutics, and is an observer on the board of Encycle Therapeutics.

ALI TEHRANI

President and CEO, Zymeworks

Vancouver, BC

Dr. Tehrani is one of our co-founders and has served as our President and Chief Executive Officer and as a member of our Board of Directors since the Company's inception in September 2003. He has been an integral part of many of our corporate achievements including raising seed and angel financing and overseeing our technical operations and patent filings. Dr. Tehrani holds both Bachelor's and Master's of Science degrees in Biochemistry from the University of Massachusetts, and has a Doctoral degree in Microbiology and Immunology from the University of British Columbia. While completing his Ph.D. degree he co-founded the Student Biotechnology Network, for which he received the UBC Faculty of Science Achievement Award for Outstanding Leadership in 2002. Dr. Tehrani has served as a board director for the Student Biotechnology Network, CQDM, LifeSciences British Columbia, on the MITACS Industrial Advisory Board, and on BIOTECanada's Industrial and Environmental Committee. He was a Council Member on British Columbia's Premier's Technology Council from 2016 to 2018. Currently, he is a member of the board of directors of Creatus Biosciences Inc.

YOULA TSANTRIZOS

Professor, Department of Chemistry, McGill University

Montréal, QC

Youla S. Tsantrizos obtained her Ph.D. degree in Organic Chemistry in 1990 from McGill University and then pursued Post-Doctoral studies at Brown University from 1990 to 1991. In 1991, she joined the Department of Chemistry and Biochemistry at Concordia University in Montreal at the level of Assistant Professor, where she earned tenure and was promoted to Associate Professor in 1996.

In 1997 (during a sabbatical leave from Concordia University), she was a visiting scientist at Boehringer Ingelheim (Canada) Ltd when she was asked to join the Department of Chemistry at the level of Senior Research Scientist. During her 10 year career at Boehringer Ingelheim, she held a number of leadership roles in medicinal chemistry and participated in activities that moved a number of antiviral agents through the different stages of the drug discovery process, including lead optimization, pre-clinical and clinical development. In recognition of her contributions to R&D in pharmaceutical research, she received the 2000 International R&D Boehringer Ingelheim Award and was promoted to Group Leader/ Distinguished Scientist.

In 2009, she joined the Department of Chemistry at McGill University at the level of Associate Professor and was promoted to Full Professor in 2011. In addition, she is an Associate Member of the Biochemistry Department at McGill University, and a member of the McGill University Centre for Structural Biology (CSB). She has served as Vice President, President and Past President of the Canadian Society for Chemistry (CSC 2013/16) and Chair of the National 84th CSC Conference (2001). She serves on various grant review panels, including the Natural Science and Engineering Research Council of Canada (NSERC), the Canadian Institute of Health Research (CIHR) and the Ontario Institute for Cancer Research. Her current research projects focus on the discovery of human therapeutics for the treatment of cancer, neurodegenerative diseases and viral infections.

SCIENCE ADVISORS

LISA BARRETT

Assistant professor, Division of Infectious Diseases, Department of Medicine , Department of Microbiology & Immunology, Department of Pathology, Dalhousie University
Principal investigator, Senescence Aging Infection & Immunity Lab

Dalhousie, NS

Dr. Lisa Barrett is a clinician scientist with expertise in infectious disease and human immunology. She received her PhD (2008) and MD (2005) from Memorial University in Newfoundland. Her doctoral work investigated anti-viral responses to Hepatitis C virus in the context of HIV co-infection.

Dr. Barrett extended her medical training and completed an internal medicine residency at Dalhousie University in 2009 and an adult infectious disease fellowship at the University of Toronto in 2011.

She completed postdoctoral and clinician scientist training at the National Institute of Allergy and Infectious Diseases, NIH, Bethesda, MD, where she was the immunologic lead on several early phase clinical trials investigating direct-acting antiviral therapy for Hepatitis C virus and a Phase 1 trial of immune based therapy for Hepatitis B virus. Her postdoctoral human immunology studies examined the impact of Hepatitis C infection and viral clearance on immunologic aging.

Dr. Barrett joined Dalhousie University in 2013 and established the Senescence, Aging, Infection and Immunity Laboratory, which combines her infectious disease and immunology expertise and is comprised of an expert team of clinical and basic science researchers.

MARCELINE CÔTÉ

Professor and researcher, Canada Research Chair in Molecular Virology and Antiviral Therapeutics, Faculty of Medicine, Department of Biochemistry, Microbiology & Immunology, UOttawa

Ottawa, ON

The overarching goal of the Côté laboratory is to improve understanding of host-pathogen interactions during infection by emerging viruses, towards the development of novel host- and/or viral-oriented antiviral therapeutics. In the laboratory, they combine virological, chemical biology, and genetic approaches to identify host proteins critical for viral infection that can be targeted to block virus spread. The Côté lab is particularly interested in acquiring a detailed understanding of the entry pathways of filoviruses (Ebola and Marburg viruses), arenaviruses (Lassa fever virus), and coronaviruses (Severe acute respiratory syndrome virus and Middle East respiratory syndrome virus).

Dr Côté received her BSc at the Université de Sherbrooke and her PhD from McGill University. She was a postdoctoral fellow at Brigham and Women's Hospital and Harvard Medical School.

ELEANOR FISH

Professor, Department of Immunology, University of Toronto
Associate Chair, International Initiatives & Collaborations, University of Toronto
Emerita Scientist, University Health Network

Toronto, Ontario

Eleanor Fish, PhD, focuses her research on understanding the host immune response to different diseases: autoimmune diseases such as rheumatoid arthritis and multiple sclerosis, breast cancer and, the major focus, virus infections. Integrated in all her studies is a consideration of the differential immune response between males and females.

Her research is focused on the interactions of cytokines, specifically interferons and chemokines, with their receptors in normal and diseased tissues and cells. Here research spans interrogating human cells and tissues in the laboratory to conducting clinical studies.

To develop broad-spectrum antivirals, with widespread application regardless of the virus infection, Fish investigates host-pathogen interactions at the cellular and molecular level. During the 2003 outbreak of SARS in Toronto, Fish initiated studies to investigate the therapeutic potential of interferon treatment in SARS patients. Encouraging results directed her group's efforts toward examining interferon activity against a number of emerging global infectious diseases, including influenza, Ebola virus and Zika virus. Fish undertook a clinical trial to evaluate the safety and effectiveness of interferon treatment for ebola virus disease in Guinea, during the outbreak, with results identifying therapeutic benefits. Most recently she conducted an exploratory clinical study in Wuhan, China, at the start of the COVID-19 pandemic. Her findings revealed that interferon treatment accelerated viral clearance from the airways, reduced lung abnormalities and limited inflammation. These findings have provided the basis for randomized controlled trials.

Fish has collaborated extensively with international partners: academic, biotech and pharma.

MATTHIAS GÖTTE

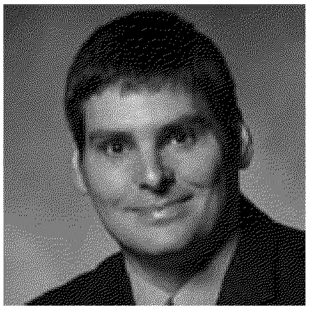
Professor and Chair, Department of Medical Microbiology & Immunology, Li Ka Shing Institute of Virology, University of Alberta

Edmonton, Alberta

Research in Dr. Götte's laboratory is focused on the study of viral replication, its inhibition and mechanisms associated with drug resistance. His interests cover a broad range of important human pathogens including RNA viruses with a high epidemic potential.

In 1997, Dr. Götte obtained his Ph.D. degree at the Max-Planck-Institute for Biochemistry in Martinsried, Germany. He started his independent research in 2000 following a three-year period of postdoctoral training at the Lady Davis Institute for Medical Research in Montreal. Dr. Götte later joined the Department of Microbiology & Immunology at McGill University and was promoted to Full Professor in 2011. Results from his laboratory have contributed to the development of novel classes of viral polymerase inhibitors. His team elucidated the mechanism of action of the investigational drug remdesivir that is now used in several countries to treat COVID-19 patients with severe disease. Dr. Götte has published approximately 130 peer-reviewed papers in the field of virology and antivirals. His research program is funded through national and provincial grants, and contracts from industry.

FRANCOIS JEAN



Professor of Molecular Virology, Founder and former Scientific Director of UBC's Facility for Infectious Disease and Epidemic Research, Life Sciences Institute, University of British Columbia

Vancouver, BC

Dr. Jean received his B.Sc. from the Université de Montréal and his M.Sc. and Ph.D. from the Clinical Research Institute of Montréal. He completed an MRC postdoctoral fellowship at the Vollum Institute, Oregon Health Sciences University. Since he joined the UBC Department of Microbiology and Immunology, Dr. Jean has been leading major research initiatives, funded by the Canadian Institutes of Health Research (CIHR) and the Networks of Centres of Excellence (NCE), to discover novel broad-spectrum antiviral agents and biomarkers directed at human pathogenic enveloped viruses.

As scientific director of the UBC Facility for Infectious Disease and Epidemic Research (FINDER) for nine years (2008-2016), he established one of the largest university-based containment level 3 (CL-3) facilities in the world. Dr. Jean is currently leading five major international research initiatives to discover novel antivirals for SARS-CoV-2, the virus that causes COVID-19, and funded by three grants from the CIHR COVID-19 Rapid Research Funding Opportunity, one grant from the Genome BC COVID-19 Research and Innovation Projects, and one grant from the Natural Sciences and Engineering Research Council of Canada (NSERC) Alliance Program (total funding for COVID-19: $4.25 million).

Dr. Jean has won several prestigious scholarly awards including a 5-year new investigator award from CIHR/Health Canada, a Peter Wall Institute for Advanced Studies Early Career UBC Award, the Fisher Scientific Award from the Canadian Society for Microbiologists, and the UBC Faculty of Science Service Award in recognition of his leadership role in establishing FINDER [CFI award ($19.3 million)]. Dr. Jean holds 15 collective invention disclosures and 5 patent applications, has published 184 peer-reviewed papers and abstracts, given 82 invited presentations, and mentored 110 trainees in virology.

SAMIRA MUBAREKA

Clinician-Scientist, Medical Microbiologist and Infectious Disease consultant at Sunnybrook Health Sciences Centre

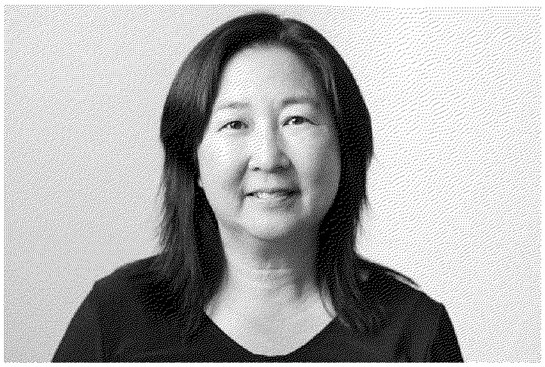
Toronto, ON

Samira completed her MD at Dalhousie University in 1999 and Internal Medicine training in 2002 at McGill University in Canada. She specialized in Infectious Diseases and Medical Microbiology at the University of Manitoba (2005). She went on to a research fellowship at the Mount Sinai School of Medicine, New York City, in the laboratory of Dr. Peter Palese, Department of Microbiology (2009). Since then she continued to pursue themes of viral transmission and spread through three research lines of inquiry: a) in vitro and in vivo experimental bioaerosols emitted by naturally-infected hosts to explore the determinants of bioaerosol generation and survival. In collaboration engineering colleagues and others she has been closely involved in building facilities to model particle velocities from coughs, characterize polluting particulates-virus interactions and determine microbial contaminants of medical air systems b) through an occupational health lens and as part of the University of Toronto's Centre for Research Excellence for Occupational Disease Biohazards group, Samira conducted studies examining bioaerosol generation by patients with laboratory-confirmed influenza and c) in close collaboration with animal health colleagues at the University of Guelph and the National Centre for Animal Diseases (NCFAD), over the past 3-4 years she has focused on pathogen emergence, incorporating characterization of influenza virus bioaerosols generated by swine in agriculture3 with genomics. Samira was also recently funded for arthropod-vectorborne work in collaboration with the NML and the Public Health Agency of Canada (PHAC) by PHAC's Infectious Diseases and Climate Change fund, and to examine coronavirus transmission among Canadian bats (NSERC), incorporating behavioural, biological, ecological and epidemiological considerations.

Early in the pandemic Samira and colleagues isolated the SARS-CoV-2 virus in containment level 3 (CL3) and is the principle source of SARS-CoV-2 to most academic CL3 laboratories across the country. She serves on the Chief Science Advisor of Canada's COVID-19 Panel, the Implementation Committee of the Canadian COVID-19 Genomics Network (CanCOGeN) Viral Seq project (Genome Canada), Ontario Genomics' Steering Committee for the Ontario COVID-19 Genomics Rapid Response Coalition and chairs the Ontario Academic Health Sciences SARS-CoV-2 Sequencing

Network (ONS2). She has collaborated extensively with fluid dynamics engineers and others to fill gaps in the understanding of viral bioaerosol dispersion. Samira formed the Sunnybrook Translational Research Program for Emerging and Respiratory Viruses (SERV) to focus on viral genomics, transmission and the development of medical countermeasures.

PAMELA OHASHI



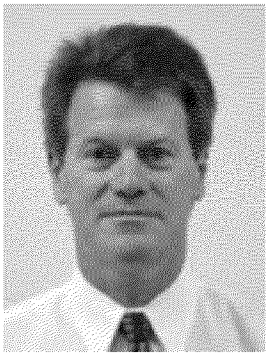
Director, Tumor Immunotherapy Program, Princess Margaret Cancer Centre
Senior Scientist, Professor, Department of Immunology, University of Toronto

Toronto, ON

Dr. Ohashi received her Ph.D from the University of Toronto with Dr. Tak Mak, and did her post-doctoral training at the University of Zurich with the Nobel Laureate Dr. Zinkernagel, and Dr. Hans Hengartner. She is a Senior Scientist and Director of the Tumor Immunotherapy Program at the Princess Margaret Cancer Centre, and a Professor in the Department of Immunology at the University of Toronto. Her interests include understanding CD8+ T cell biology and mechanisms that regulate anti-tumor immunity.

Dr. Ohashi has received a number of prestigious awards and honors including the American Association of Immunologists (AAI) Pharmingen Investigator Award, the National Cancer Institute of Canada's William E. Rawls Award, The Canadian Society of Immunology's Investigator Award as well as a Tier 1 Canada Research Chair. She previously served as the Chair of the Cancer Immunotherapy Steering Committee of the American Association for Cancer Research (AACR), and also previously served on the Board of Directors of the Society for Immunotherapy of Cancer (SITC). She has also been elected as a member of the Royal Society of Canada.

JAMES RUSSELL



Professor, Department of Medicine, University of British Columbia; Principal Investigator at the SPH-based Centre for Heart Lung Innovation

Vancouver, BC

Dr. Russell is a Professor of Medicine at UBC and a Principal Investigator at the SPH-based Centre for Heart Lung Innovation (HLI). He was a co-founder and founding CEO of Sirius Genomics Inc., a spin off company of UBC and SPH. Sirius raised $16M to attempt to identify and validate genomic markers (i.e. predictive biomarkers) of improved response to what was the only approved drug for sepsis, activated protein C (Xigris). Dr. Russell was also co-founder and Chief Medical Officer of Cyon Therapeutics, another spin-off of UBC and SPH. Through their ground-breaking scientific discoveries the team sought to develop the means to boost the body's natural ability to clear infectious toxins from the bloodstream. Bacterial toxins are found in cholesterol, so Cyon's technology focused on increasing the clearance of cholesterol bound toxins. The major discovery was that genetic variants of PCSK9 – loss of function variants - have improved survival from septic shock and that in murine models, PCSK9 knock-outs and antibodies to PCSK9 also have improved survival from septic shock. This important discovery has potentially important therapeutic implications in septic shock; we are now investigating the potential efficacy and safety of PCSK9 inhibitor(s) in septic shock.

Dr. Russell is ranked # 1 in the world in septic shock (http://expertscape.com/ex/septic+shock). Dr. Russell has three major current themes of research (1) randomized controlled trials in patients with septic shock and now COVID-19, (2) biomarkers of septic shock and COVID-19, and (3) the interaction of diabetes and sepsis/septic shock.

The COVID-19 pandemic led to CIHR-funded studies of the safety and effectiveness of angiotensin receptor blockers (ARBs) and angiotensin converting enzyme (ACE) inhibitors in COVID-19 in (1) a pan-Canadian observational cohort and (2) a pan-Canadian randomized controlled trial of losartan (an ARB) vs. usual care in adults hospitalized with COVID-19. Dr. Russel is also funded to evaluate the interactions of biological sex with outcomes of COVID-19.

Dr. Russell pursued his undergraduate degree (AB) in Biology and Biochemistry at Princeton University and medical degree (MD) at the University of Toronto. He completed a residency in Internal Medicine at Toronto General Hospital and University of Toronto. He chose to go to the University of California, San Francisco for his Fellowship in Critical Care Medicine and research training. He then returned to Toronto General Hospital as Director of the Medical ICU before being recruited to Vancouver, BC as Director of the Medical Surgical ICU at St. Paul’s Hospital. He built a world-class team of basic science, translational, and clinical researchers in Critical Care focused on molecular mechanisms and treatment of sepsis. He was Chair of Medicine at St. Paul’s and Head of the Division of Critical Care Medicine for University of British Columbia (UBC).

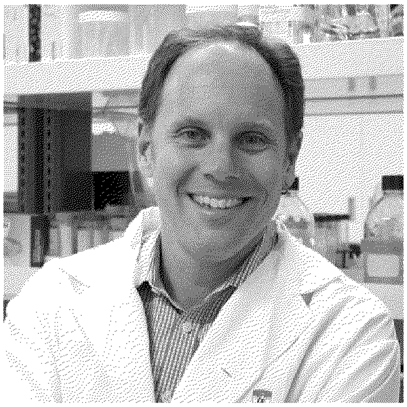
MAKEDA SEMRET

Associate Professor in the Department of Medicine, Division of Infectious Diseases at McGill University; Medical Microbiologist at the McGill University Health Centre

Montreal, QC

Dr. Semret is specialized in infectious diseases/medical microbiology and is the Antimicrobial Stewardship Program lead for the McGill University Health Centre (MUHC) where she is responsible for the development of clinical management guidelines for COVID-19. Her clinical research focus is on identifying specific interventions to better inform clinical decision-making and reduce the burden of Antimicrobial Resistance. She co-leads clinical trials on COVID-19 therapeutics and is the Canadian Principal Investigator of the PILGRIM consortium, an international research group (funded by the Joint-Programing Initiative on Antimicrobial Resistance, JPI-AMR) assessing the impact of antimicrobial prescription quality on the emergence of drug-resistance in the intestinal microbiota. She has an active infectious diseases training and research program in Ethiopia and is the founder of an institutional partnership between Addis Ababa University and McGill (AMP-ID). Her team in Ethiopia works on strengthening laboratory capacity and identifying specific clinical interventions to improve the quality of care and patient safety in low-resource settings.

DON SHEPPARD



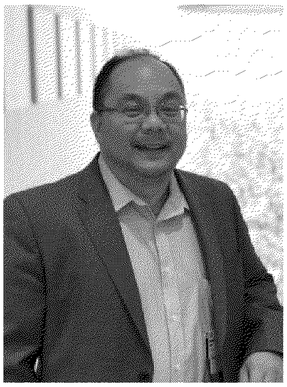
Director of the McGill Interdisciplinary Initiative in Infection and Immunity

Montreal, Quebec

Don Sheppard is an infectious diseases physician and medical microbiologist who is Chair of the Department of Microbiology and Immunology, and practices clinical infectious diseases at the McGill University Health Centre, where he served as the Director of the Division of Infectious Diseases from 2012-2018.

Dr. Sheppard's research interests focus on the role of microbial polysaccharides in virulence, and the development of novel therapies that target these molecules.

DON VINH



Associate Professor, MUHC Department of Medicine, Division of Infectious Diseases; Medical Microbiologist (OptiLab); FRQS clinician-scientist scholar (Junior 2) at the RI-MUHC; Associate Member in the Division of Allergy & Clinical Immunology and in the Department of Human Genetics

Montreal, QC

Dr. Vinh obtained his medical degree in 2001 from McGill University. He completed Internal medicine residency (at McGill), then a combined fellowship in Infectious Diseases (at the University of Manitoba) and in Medical Microbiology (at McGill). He subsequently completed a three year, post-doctoral translational research fellowship at the National Institutes of Health (NIH) to understand inborn errors of immunity that render humans susceptible to infections, particularly fungal diseases. This research, in the laboratory of Dr. Steve Holland, was supported by a CIHR post-doctoral fellowship award and a NIH Visiting Fellow award. This work focused on understanding chronic granulomatous disease, Job's syndrome, and defects in the interleukin (IL)-12/interferon (IFN)-gamma axis. It culminated in the discovery of a new genetic disorder marked by immunodeficiency and leukemia, termed "MonoMac syndrome", due to mutations in GATA2. Indeed, GATA2 deficiency is one of the most common causes of myelodysplastic syndrome (MDS)/acute myeloid leukemia (AML) in young patients. His work earned him the Canadian Foundation for Infectious Diseases' "Excellence in Infectious Disease Research Award" in 2010 and the 2013-2014 "NIH Merit Group Award" as a member of the GATA2 Discovery Group.

Dr. Vinh returned to the MUHC in October 2010 and established the Infectious Disease Susceptibility Program, a translational research program that focuses on deciphering how genetic defects of the immune system render patients susceptible to infectious diseases. His work on CARD9 deficiency and susceptibility to invasive fungal disease was recognized by AMMI Canada's "Young Investigator Award" (2016). Dr. Vinh continues to expand the field of Inborn Errors of Immunity, with his discovery of a novel combined immunodeficiency syndrome due to autosomal recessive ICOSL deficiency (2018). His translational program on these diseases has also garnered him the MUHC's Department of Medicine "Early Career Staff Research Award" and "Outreach Award" (2018). Dr. Vinh's expertise is broadly recognized, as he has published in Lancet

Infectious Diseases, New England Journal of Medicine, Journal of Allergy and Clinical Immunology, Clinical Infectious Diseases, Nature, Nature Microbiology, and Lancet.

Dr. Vinh is Associate Professor (MUHC Department of Medicine; Division of Infectious Diseases), Medical Microbiologist (OptiLab), and FRQS clinician-scientist scholar (Junior 2) at the RI-MUHC. He is also Associate Member in the Division of Allergy & Clinical Immunology and in the Department of Human Genetics. As well, he is member of the Research Management Committee of GlycoNet (a Networks of Centers of Excellence program); Chair of the Guidelines Committee of the Association of Medical Microbiologists and Infectious disease specialists (AMMI) Canada; member of the Education and the Communications committees of the Clinical Immunology Society; and member of the Comité consultatif québécois sur les maladies rares for the Québec Minister of Health. Most recently, he is Director of the MUHC COVID Biobank, member of the pan-American COVID-19 and Cancer Consortium (CCC19), and the Canadian lead in the international COVID Human Genetics Effort (COVIDhge) consortium.

COVID-19 THERAPEUTICS TASK FORCE

Agenda for February 25th, 2021

Location: WebEx
Date: Thursday, February 25th, 2021
Time: 10 a.m. to 11:30 a.m. eastern

Co-chairs: Nancy Harrison & Cédric Bisson

TIME	AGENDA ITEM	PRESENTER(S)
10:00	**1. Welcoming Remarks from Co-Chairs**	Cédric Bisson
10:00-10:30 (30 mins)	**2. Minister Champagne**	Honourable François-Philippe Champagne, Minister of Innovation, Science and Industry
10:30-10:45 (15 mins)	**3. Finalize Advice Letter**	All
10:45-11:15 (30 mins)	**4. DM Kennedy and DM Lucas**	Simon Kennedy, Deputy Minister of Innovation, Science and Economic Development Stephen Lucas, Deputy Minister of Health
11:15-11:30 (15 mins)	**5. Minister Hajdu**	Honourable Patty Hajdu, Minister of Health
11:30	**6. Close**	Cédric Bisson

1. Welcome and Introduction (TTF Co-Chairs, Nancy Harrison and Cedric Bisson)

10:00am

Nancy Harrison and Cedric Bisson will provide brief opening remarks and then turn to Minister Champagne.

Note: You will join the meeting after Minister Champagne has made his remarks and the TTF has held their discussion on finalizing their advice letter.

2. Remarks (Minister Champagne)

10:00-10:30am

Minister Champagne will offer his thanks to TTF Members.

3. Finalize Advice Letter

10:30-10:45am

TTF Members will work on finalizing their final advice letter.

4. DM Kennedy remarks

10:45-11:15am

ISED Deputy Kennedy will make remarks.

5. Remarks (Minister Hajdu)

11:15-11:30am

[You will be accompanied by the Deputy to make your remarks to the TTF.]

- Hello and thank you so much for taking the time to meet today.

- I understand this is your last meeting, and I'm grateful you made the time for me and Minister Champagne today.

- As part of Canada's response to the pandemic, our government struck a number of task forces to ensure we received the appropriate external advice to guide our response on therapeutics, vaccines, immunity, testing and, more recently, the variants.
  - Our approach to investing in and purchasing promising therapeutics in the fight against COVID-19, has been informed by the work and expertise of this Task Force.
  - Your work has also provided important considerations as the government considers necessary next steps to build biomanufacturing capacity here in Canada.
- As you know, the federal government faces multiple challenges and complexities in protecting the health and welfare of Canadians during this pandemic. As the pandemic evolves and changes, so too must the federal response.
  - One of the lessons we have learned alongside you, is that we have more work to do with provinces and territories to ensure that the promising therapeutics we purchase federally are going to be used by provinces and territories. I know this has been a frustration for you, and I want to assure that work in this area is continuing.
- As your mandate comes to an end, I want to thank each of you for your tireless and voluntary efforts to serve your country. Canada is in a better position thanks to the work of this group.
- As the federal government continues to navigate this pandemic we know that we will still need advice. I hope that I can count on your expertise from time to time, as needed, in the coming months.
- Thank you.

4. Close

11:30am

There may be an opportunity for TTF members to make comments or ask questions.

The Co-chairs will then summarize key points raised in the discussion.